CLAIMS:

1. An MRI apparatus comprising:

an MR signal acquiring device for acquiring MR signals;

a window-processing device for window-processing the MR signals using a window function that has a value less than one at a center and in its proximate region in a k-space and on a periphery and in its proximate region in the k-space, and, between the regions in which the window function has a value less than one, has a value larger than that in the regions in which the window function has a value less than one; and

a Fourier-transformation processing device for applying Fourier-transformation processing to the window-processed MR signals to obtain an MR image.

2. An MRI apparatus comprising:

an MR signal acquiring device for acquiring MR signals;

a window-processing device for window-processing the MR signals using a window function that has a value less than one at a center of a k-space, first increases to a value C equal to or more than one as it goes farther from the center, remains at C for a certain duration, then passes to one, and decreases to a value less than one as it goes from near a periphery to the periphery of the k-space; and

a Fourier-transformation processing device for applying Fourier-transformation processing to the window-processed MR signals to obtain an MR image.

3. The MRI apparatus of claim 2, wherein the window function is a function using a Gaussian function in the region in which the window function increases to C.

4. The MRI apparatus of claim 2, wherein the window function is

a function using a Fermi-Dirac function in the region in which the window function decreases to a value less than one.

5. An MRI apparatus comprising:

an MR signal acquiring device for acquiring MR signals;

a window-processing device for window-processing the MR signals using a window function that has a value less than one at a center of a k-space, first increases to one as it goes farther from the center, remains at one for a certain duration, and decreases to a value less than one as it goes from near a periphery to the periphery of the k-space; and

a Fourier-transformation processing device for applying Fourier-transformation processing to the window-processed MR signals to obtain an MR image.

6. The MRI apparatus of claim 5, wherein the window function is a function using a Gaussian function in the region in which the window function increases to one.

7. The MRI apparatus of claim 5, wherein the window function is a function using a Fermi-Dirac function in the region in which the window function decreases to a value less than one.

8. The MRI apparatus of any one of claims 1, 2 and 5, further comprising:

a three-dimensional data generating device for generating three-dimensional data from MR images produced for a plurality of sequential slices; and

a MIP-processing device for conducting MIP processing on the three-dimensional data to produce a projection image.